



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/396,429	09/15/1999	JOHN S. HENDRICKS	5815	7434

7590 10/23/2002

ALDO NOTO
DORSEY & WHITNEY LLP
1001 PENNSYLVANIA AVENUE N.W.
SUITE 300 SOUTH
WASHINGTON DC, DC 20004

EXAMINER

GRANT, CHRISTOPHER C

ART UNIT	PAPER NUMBER
2611	9

DATE MAILED: 10/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/396,429	Applicant(s) Hendricks et al.	Examiner Christopher Grant	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.

- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.

- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on Aug 2, 2002

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-16 and 18-59 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-16 and 18-59 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on Aug 2, 2002 is/are a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). <u>8</u>	6) <input type="checkbox"/> Other: _____

Art Unit: 2611

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 14 and 24-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Banker et al. (Banker) (5357276).

Considering claims 1, 14 and 24-25, Banker discloses a system comprising:

- a) a television program delivery system (10, figure 1);
- b) a settop terminal (40,44, or 48, figure 1) having microprocessor (128,136) instructions for prompting generation of menus and comprising:

Art Unit: 2611

c) a television program receiver (100,150) for receiving television programs from one or more headends (10); and

a hardware upgrade (improvement to the settop terminal) comprising:

d) an interface (124, 126) to the set top terminal for receiving and processing subscriber input (col. 5, lines 7-25); and

e) modem (col. 4, lines 40-50) capable of communicating with one or more headend (10), wherein the receiver receives television program signals based on subscriber input (see the entire reference including but not limited to col. 4, lines 40-57).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 10-16 and 19-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graczyk and Bunker.

Considering claims 1, 14 and 24-25, Graczyk discloses a system comprising:

a) a television program delivery system (broadcast or cable TV) (col. 5, lines 62-68);

Art Unit: 2611

b) a terminal (24,26) having a microprocessor and comprising a receiver (col. 4, line 63-66)

adapted to receive at least some of the television program signals;

c) a hardware upgrade (12) comprising:

(c1) an interface (16450 interface) (col. 7, lines 9-18) to the terminal; and

(c2) a modem (104) connected to the interface capable of communicating with one or more headends (central facilities).

Although Graczyk discloses a multipurpose television terminal (24,26) and that various modifications and alternative embodiments are apparent (col. 36, lines 14-20), he fails to specifically disclose a set top terminal having a microprocessor instructions for prompting generation of menus and a hardware upgrade comprising an interface and a modem capable of communicating with one or more headends, wherein the settop terminal receives television program signals based on subscriber input as recited in the claims.

Banker discloses a system comprising:

a) a settop terminal (40, figure 1) having microprocessor (128,136) instructions for prompting generation of menus and comprising: a television program receiver (100,150) for receiving television programs from one or more headends (10); and

b) a hardware upgrade (improvement to the settop terminal) comprising: an interface (124, 126) to the set top terminal for receiving and processing subscriber input (col. 5, lines 7-25); and

Art Unit: 2611

modem (col. 4, lines 40-50) capable of communicating with one or more headend (10), wherein the receiver receives television program signals based on subscriber input (see the entire reference including but not limited to col. 4, lines 40-57). Banker's system facilitates an efficient two-way communication and menu selection between one or more headend and a subscriber terminal.

It would have been obvious to one of ordinary skill in the art to modify Graczyk's system to include a set top terminal having a microprocessor instructions for prompting generation of menus and a hardware upgrade comprising an interface and modem capable of communicating with one or more headends, wherein the settop terminal receives television program signals based on subscriber input, as taught by Banker, for the advantage creating an efficient two-way communication and menu selection system involving one or more headends and a subscriber terminal.

Claim 2 is met by the combined systems of Graczyk and Banker, wherein Graczyk discloses a processor (RC224) (figure 2).

Claim 3 is met by the combined systems of Graczyk and Banker, wherein Graczyk discloses memory (108,110).

Claim 11 is met by the combined systems of Graczyk and Banker, wherein Graczyk discloses a connector in figure 41.

Art Unit: 2611

Claim 15 is met by the combined systems of Graczyk and Banker, wherein Graczyk discloses the display of the data or fax received via the modem that indicates that the upgrade is in use. See the entire reference including but not limited to col. 5, lines 1-14.

Claim 16 is met by the combined systems of Graczyk and Banker, wherein Graczyk discloses an expansion slot in figure 45 that accepts the interface connector as indicated in figure 41.

Claim 19 is met by the combined systems of Graczyk and Banker, wherein Graczyk discloses/illustrates the additional cards, connectors or modules in figures 42, 43 and 44. Note also that figure 45 illustrates the capability of accepting additional cards or boards or modules.

Claims 13 and 20-21 are met by the combined systems of Graczyk and Banker, wherein Graczyk discloses terminal (24) which operates with (ISA) interfaces, COM1, COM2 and COM3 ports (col. 6, line 62 - col. 7, line 8) and SCSI connectors which are serial or daisy chain configurations. (See the entire reference including but not limited to col. 22, lines 52-68).

Claim 22 is met by the combined systems of Graczyk and Banker, wherein Graczyk discloses the simultaneous uses of one or more of the hardware upgrades in col. 5, lines 3-14.

Art Unit: 2611

Claim 23 is met by the combined systems of Graczyk and Banker, wherein Graczyk discloses audio program reception hardware (see 18-figure 1 or 530-figure 43 or 510-figure 44).

Considering claims 10 and 12, the combined systems of Graczyk and Banker disclose various types of connectors in columns 12-36 and figures 41-48 (Graczyk). However, they fail to specifically disclose that the interface is a four-wire connector and a multi-pin connector ranging from DB9 and DB25 as recited in the claims.

The examiner takes Official Notice that it is notoriously well known in the art to utilize four-wire connectors and multi-pin connectors ranging from DB9-DB25 to connect one device to another. These are readily available low cost connectors used in television and/or computer terminals and they provide a convenient way to connect and dis-connect devices and electronic products.

It would have been obvious to one of ordinary skill in the art to modify the combined systems of Graczyk and Banker to include a four-wire connector and a multi-pin connector ranging from DB9 and DB25 because these are readily available low cost connectors that provide a convenient way to connect and dis-connect devices.

As for claim 18, Graczyk and Banker disclose an electronic visual communication system and more particularly a multi-purpose computerized television system (Graczyk, col. 1, lines 5-10). They also disclosed that various modifications and alternative embodiments are apparent to a

Art Unit: 2611

person skill in the art. (Graczyk, col. 36, lines 14-22). However, they fail to specifically disclose that the terminal is an HDTV terminal as recited in the claim.

The examiner takes Official Notice that HDTV terminals are notoriously old and well known terminals in the art for receiving high resolution television signals and these terminals can be integrated with any other television receiving apparatus.

Therefore, it would have been obvious to one of ordinary skill in the art to modify the combined systems of Graczyk and Banker to include the terminal to be a HDTV terminal because it is a well known, readily available and modifiable terminal for receiving high resolution television signals.

As for claims 26-29, Graczyk and Banker disclose receiving television signals from broadcast and cable television stations (col. 5, lines 61-68). However, they fail to specifically disclose an operations center, one or more headends and a satellite broadcasting system as recited in the claims.

The examiner takes Official Notice that an operations center (a central facility to a headend or master headend), one or more headends and a satellite broadcasting system are notoriously old and well known communication stations that broadcast television signals to subscribers. At these stations (headend, central facilities), television programs are received, processed and prepared for transmission to subscribers.

Art Unit: 2611

Therefore, it would have been obvious to one of ordinary skill in the art to modify the combined systems of Graczyk and Banker (if necessary) to include an operations center, one or more headends and a satellite broadcast system because these are typical places where television signals are received processed and prepared for transmission to subscribers.

5. Claims 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graczyk, Banker, as applied to claim 1 above, and further in view of Palazzi.

Considering claims 4-9, the combined systems of Banker and Graczyk disclose monitoring financial news via a financial news network in col. 5, lines 3-14 (Graczyk). They fail to specifically disclose that the modem is capable of communicating with interactive service, the interactive service is outside the television program delivery system, the interactive service is selected from the group consisting of home shopping, airline reservations, news, financial information, advertisement, home banking and interactive text, communicating with an on-line database and the on-line database is outside the television program delivery system as recited in the claims.

Palazzi discloses a modem that is capable of communicating with several interactive services and/or on-line databases wherein the interactive services/on-line databases are outside the television network. This provides a terminal with the ability to efficiently communicate with various networks, interactive services and databases. See the entire reference including but not

Art Unit: 2611

limited to column 1, line 5 - column 4, line 45, column 5, lines 63-66 and column 9, line 60 - column. 10, line 35.

It would have been obvious to one of ordinary skill in the art to modify the combined systems of Graczyk and Banker (if necessary) to include a modem capable of communicating with interactive service, the interactive service is outside the television program delivery system, the interactive service is selected from the group consisting of home shopping, airline reservations, news, financial information, advertisement, home banking and interactive text, communicating with an on-line database and the on-line database is outside the television program delivery system, as taught by Palazzi, for the advantage of providing a terminal with the ability to efficiently communicate with various networks, services and databases.

6. Claims 30-42, 45-52, 55-56 and 58-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palazzi (of record) and Banker et al. (Banker).

Considering claim 30, Banker discloses a television terminal (40,44, or 48) having microprocessor (128,136) instructions for prompting generation of menus, the television terminal comprising:

- a) a television program receiver (100,150) for receiving television programs from one or more headends (10);
- b) an interface (124, 126) to the television terminal for receiving and processing subscriber input (col. 5, lines 7-25);

Art Unit: 2611

- c) modem (col. 4, lines 40-50) capable of communicating with one or more headend (10), wherein the receiver receives television program signals based on subscriber input (see the entire reference including but not limited to col. 4, lines 40-57);
- d) an output (142, TV 42) connected to the receiver (100,150) and the modem, wherein the output accepts television program signals from the receiver.

However, Banker fails to specifically disclose an output that accepts data signals from the modem as recited in the claim.

Palazzi discloses a television terminal comprising a television program receiver (11), a modem (4) an output (9, 10, 15) connected to the receiver (11) and modem (4), wherein the output accepts television program signals from the receiver and data signals from the modem. Palazzi's system provides an efficient system for creating an interactive display terminal for accessing information stored in remote computer databases. See abstract and col. 3, line 64 - col. 4, line 44.

It would have been obvious to one of ordinary skill in the art to modify Banker's system to include an output that accepts data signals from a modem, as taught by Palazzi, for the advantage of providing an efficient interactive display terminal that accesses information stored in remote computer databases.

Art Unit: 2611

Claim 31 is met by the combined systems of Banker and Palazzi, wherein Banker discloses television (42,46 or 50, figure 1) and Palazzi discloses television (15).

Claim 32 is met by the combined systems of Banker and Palazzi, wherein Palazzi discloses a connector port (10) and Banker's modulator (142) is inherently connected to television (42) via a connector port.

Claim 33 is met by the combined systems of Banker and Palazzi, wherein Banker discloses microprocessor (128, 136) and Palazzi discloses a microprocessor (5).

Claim 34 is met by the combined systems of Banker and Palazzi, wherein Banker discloses a memory (137,134) and Palazzi discloses a memory at col. 6, lines 18-45, 53-54, col. 7, lines 62-68 and col. 9, lines 20-40.

Claims 35-39 are met by the combined systems of Banker and Palazzi, wherein Palazzi discloses interactive services/on-line databases provided by the host databases that are external to the television program delivery system throughout the entire reference including but not limited to column 1, line 5 - column 4, line 45, column 5, lines 63-66 and column 9, line 60 - column. 10, line 35.

Claim 40 are met by the combined systems of Banker and Palazzi, wherein Palazzi discloses online database(s) containing travel information, stock quotation and other data

Art Unit: 2611

throughout the reference including but not limited to col. 1, lines 15-23, col. 3, lines 25-60 and col. 9, line 60 - col. 10, line 35.

Claim 41 are met by the combined systems of Banker and Palazzi, wherein Palazzi discloses HDTV capability in col. 6, lines 55-64.

Considering claim 42, Banker discloses a method for delivering television programs through a television delivery system (figure 1) with menu selection of programs (figures 5-9) comprising

- a) receiving (100,150) a television program from one or more headends (10);
- b) receiving subscriber input through an interface (124, 126) within a set top terminal, the set top terminal having a microprocessor (128,136) instructions for prompting generation of menus (col. 5, lines 7-25);
- c) communicating through a modem (col. 4, lines 40-50) with one or more headend (10), comprising transmitting data based on subscriber input (see the entire reference including but not limited to col. 4, lines 40-57); and
- d) displaying television programs.

Art Unit: 2611

However, Banker fails to specifically disclose receiving data from one or more headend and displaying television program and/or information based on the received data as recited in the claim.

Palazzi, discloses a method comprising:

a) receiving a television program (11) (col. 7, lines 54-61);

b) receiving subscriber input (col. 5, lines 63-66 & col. 8, line 23 - col. 9, line 20);

c) communicating through a modem comprising:

(c1) transmitting data based on subscriber input via (keyboard 12) (col. 7, line 62 - col. 9, line 20)

(c2) receiving data (col. 5, lines 63-66 and col. 9, lines 2-20); and

d) displaying the television program and/or information based on the received data (see the entire reference including but not limited to col. 3, line 64 - col. 4, line 16, col. 7, lines 54-61 and col. 9, lines 4-29). Palazzi's system provides an efficient system for creating an interactive display terminal for accessing information stored in remote computer databases. See abstract, col. 3, line 64 - col. 4, line 44.

It would have been obvious to one of ordinary skill in the art to modify Banker's system to include receiving data from one or more headend and displaying television program and/or information based on the received data, as taught by Palazzi, for the advantages of providing an efficient interactive display terminal that accesses information stored in remote computer databases and that provides a display of television programs and/or information.

Art Unit: 2611

Claims 45-49 are met by the combined systems of Banker and Palazzi, wherein Palazzi discloses interactive services/on-line databases provided by the host databases that are external to the television program delivery system throughout the entire reference including but not limited to column 1, line 5 - column 4, line 45, column 5, lines 63-66 and column 9, line 60 - column 10, line 35.

Claim 50 is met by the combined systems of Banker and Palazzi, wherein Palazzi discloses that online database contains travel information, stock quotation and other data throughout the reference including but not limited to col. 1, lines 15-23, col. 3, lines 25-60 and col. 9, line 60 - col. 10, line 35.

Claims 51-52 are met by the combined systems of Banker and Palazzi, wherein Palazzi discloses the various memory devices at col. 6, lines 18-45, 53-54, col. 7, lines 62-68 and col. 9, lines 20-40.

Claim 55 is met by the combined systems of Banker and Palazzi, wherein Palazzi discloses processing of stored digital data throughout the reference including but not limited col. 6, lines 18-64 and col. 9, lines 20-40.

Art Unit: 2611

Claim 56 is met by the combined systems of Banker and Palazzi, wherein Palazzi discloses stored data concerning banking services (economics) and any other local national or regional information services (reference) throughout the entire reference including but not limited to col. 9, line 60 - col. 10, line 4.

Claim 58 is met by the combined systems of Banker and Palazzi, wherein Palazzi discloses remote input from keypad (16), keyboard (12) or the keyboard connected to the CPU via a wireless link (see illustration in figure 1).

Claim 59 is met by is met by the combined systems of Banker and Palazzi, wherein Banker discloses menu generation in figures 5-9 and Palazzi discloses generating menus at col. 9, lines 13-40 and col. 10, lines 16-18.

7. Claims 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banker and Palazzi, as applied to claim 52 above, and further in view of Sprague (of record).

Considering claims 53 and 54, the combined systems of Banker and Palazzi disclose that various types of memory devices may be used (Palazzi, col. 6, lines 34-38). However, they fail to specifically disclose that the memory device is a CD-ROM as recited in the claims.

However, Sprague discloses that CD-ROMs are conventional and commercially available memory devices for storing data or information. See col. 2, lines 6-39 and col. 19, lines 1-16.

Art Unit: 2611

It would have been obvious to one of ordinary skill in the art to modify the combined systems of Banker and Palazzi to include the memory device to be a CD-ROM, as taught by Sprague, for the typical advantage of using a conventional and commercially available device to store data.

8. Claims 43-44 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banker and Palazzi, as applied to claims 42 and 51 above, and further in view of Vogel (of record).

Considering claims 43-44, Banker and Palazzi disclose receiving various types of data but they fail to specifically disclose that the data is information concerning television program and that the information is selected from a group consisting of quizzes, facts, geographical information and product information as recited in the claims.

Vogel discloses data/information concerning television programs (program schedule). Program schedule information includes facts and description of television programs. See the entire reference including but not limited to col. 3, lines 45-65 and col. 8, lines 36-46.

It would have been obvious to one of ordinary skill in the art to modify the combined systems of Banker and Palazzi to include information concerning a television program and that the information is to be selected from a group consisting of at least quizzes, facts, geographical information and product information, as taught by Vogel, for the typical advantage of receiving

Art Unit: 2611

program schedule information about programs to inform viewers about current and future television programs.

Claim 57 is met by the combined systems of Banker, Palazzi and Vogel, because Vogel discloses monitoring for reception of the program schedule information and then retrieving digital data after the reception of the program schedule information in col. 3, line 2 - col. 4, line 5.

Response to Arguments

9. Applicant's arguments with respect to claims 1-16 and 18-59 have been considered but are moot in view of the new ground(s) of rejection.

10. Applicant's failure to adequately traverse the Examiner's taking of Official Notice in the last Office Action is taken as an admission of the facts noticed.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 2611

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

12. Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for formal communications; please mark "EXPEDITED PROCEDURE")

Or:

(703) 872-9314 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris Grant whose telephone number is (703) 305-4755. The examiner can normally be reached on Monday-Friday from 8:00am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380.

Art Unit: 2611

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is (703) 306 0377.



Christopher Grant
Primary Examiner
October 18, 2002